Producing Mirror-Like Reflectivity Effects in the Microwave Band Unconventionally for Superior Waveguides via Negative Charge Amplification in a Localized Field

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Introduction

Applications requiring that a wave of electromagnetism strike an antenna at a precise relative orientation necessarily require waveguides which are capable both of redirecting waves and capable of doing so without distorting the wave's property of frequency. Magnetic fields are capable of changing the trajectory of EM waves, but they introduce distortions to frequency which destroy the very information one seeks to obtain in ELINT and other applications. Furthermore, a magnetic field lacks the precision of conventional reflection, which is fundamentally based upon the Coulomb repulsion of photons versus the electrons of the reflective materials. Extreme precision is required for applications such as the Selective Solitonization mechanism described in 21 October 2025 which allows for phase-based frequency discrimination and for combined antenna and filter functionality.

In the optical band, a sheath-shaped mirror which is wider at the aperture than at the sensor can act as a physical waveguide. At lower frequencies, photons will penetrate reflective materials rather than be reflected by them. The lower the frequency, the less of a reflective effect a conventional mirror will have upon photons. Microwave energy can be reflected by metals, but only with substantial thicknesses and only with low-precision. Such reflection also results in the absorption of a portion of the energy associated with the wave. This publication will address itself to an unconventional approach to channeling microwave-band EM waves with extreme reflexivity, no distortion to frequency and no amplitude loss.

Abstract

Sub-optical frequencies of EM are not reflected by optical mirrors and the fundamental reason for this is distinct from the reason why lower-frequency EM is less prone to scattering effects. This causative relationship important to understand in order to be able to understand how to adapt an optical mirror so that it will reflect microwave energy (under special circumstances) in the same way in which it reflects visible light.

Unlike in light-scattering (as in atmosphere) which is predicated upon the temporary absence of discrete magnetism in photons at the peaks and troughs in phase and the presence of discrete magnetism in the electrons making up the atoms by which the photons must pass in proximity, reflection, is, by contrast, a Coulomb Force-induced phenomenon. When a photon, which is negatively charged, comes into perfect alignment with a set of aligned electrons in reflective material (it might have to penetrate up to a micron into the mirror before such an alignment occurs,) its angular momentum is inverted.

As the frequency of a wave of light decreases, the mass of the photons increases. As such, Coulomb repulsions acting upon the photons have a lesser net effect on the photons as mass increases. Reflection of photons of greater mass, therefore, requires either a greater number of aligned electrons or that the electrons in the reflective material somehow be placed even more closely together within the material. How closely together electrons can be placed in a reflective material is limited by the distance between the atoms comprising the material.

Although there has been research performed into aligning greater numbers of electrons to achieve these sorts of effects, this usually entails using thicker materials which may not be compatible with a system in which a great many individual waveguides would need to be compressed into a small space featuring many of the spherical filter-antenna mechanisms (ibid..)

In order to produce the same sort of reflective effects upon microwave energy, the value of the negativity of the electrical charge of the electrons in the reflective material must be amplified in order to enable it to produce the desired repulsive effects upon the EM waves.

As explored in a previous publication; 17 January 2023; it was postulated that a neutrino vacuum generator could temporarily impair the insulative properties of insulators by diminishing the negative electrical charge of individual electrons. If it is possible to diminish the negativity of charge of an individual electron much as a dimmer switch can vary the luminosity of a lightbulb, it stands to reason that the negative charge of electrons might be artificially boosted beyond their usual standard value by locally producing surplus positive electrical charge (adjacent to the aligned electrons) amounting to an amplified gravity field.

What might termed a *neutrino fountain* may be created by trapping two protons in a space usually meant for one using magnetic confinement and causing the protons to oscillate in position nearer and farther from one-another using a separate Alternating Coulomb Force Line Generator (phononic.) This would achieve in a confined space what relativistic near-passages of accelerated protons achieves in gluon/odderon accumulators, which, although recommended in 2020 by this author for application in facilitating fusion reactions given the strong nuclear force exhibited by odderons, could also be predicted to generate some degree of *neutrino fountain effect* (a positive discrepancy of measured gravity) as a consequence of the generation of the positively charged strong attractors.

If two protons were forced into a small space, absent any electrons (anionized,) alternated Coulomb Force Lines could be used to cause the rapid oscillation of the protons. The Coulomb-repulsive force of the protons acting against one-another would result in their constantly attempting to move apart from one another, but the external Coulomb effects could be used to increase what could only be described as the temperature of the individual protons to an extreme value. It would be important to ensure that the proton trap used for this does not melt and that fusion is not inadvertently achieved.

Magnetism could be used to prevent the superheated protons from influencing the thermal properties of the surrounding material.

Much as in a counter-circulating synchrotron, the protons would, under these circumstances, generate surplus strong attractors, sc. gluons. As this would be a sub-fusion reaction, the quarks needed to form neutrons would not materialize (if they did, it would constitute a fusion reaction.) A predicted consequence of the generation of these superfluous gluons is that a field of positive charge would be created which would amplify the quantity of neutrinos (A.K.A. gravity) feeding into the electrons orbiting the atoms of the mirror material. More neutrinos means more negative electrical charge per electron.

This proposal brings with it a number of unanswered questions. It is not clear over what distance the neutrino fountain effect would influence the strength of the negative electrical charge of the electrons. Neutrino vacuum effects appear to be capable of extending over ranges of up to several miles, but those effects are the consequence of the controlled counter-circulation of hundreds of Watts of current. The neutrino fountain effect would be predicated upon individual cells composed of only two protons which would, with an aggregated effect associated with a large number of these cells operating in an array, artificially amplify the negative electrical charge of the electrons in the reflective material of which the mirror or "waveguide" is composed. To be effective, the field effect would only have to extend over a short distance of about a millimeter.

The construction of this mechanism would be complex. A conventional thinfilm optical mirror would have to be surrounded by a sheath composed of an array of these dual-proton cells which would necessarily have to feature their own Alternating Coulomb Force Projection System (phononic) in order to produce motion in the protons within the traps, as well as a magnetic field for physical containment of the protons as well as the prevention of thermal conduction (these protons would be heated to the equivalent of about 400,000 Celsius by the system to produce the desired neutrino fountain effect.)

Conclusion

If implemented, this author predicts that any electrons in proximity to this type of proton agitator mechanism would undergo an amplification of their standard negative electrical charge, a value traditionally thought to be a universal constant. If experimentally verified, it should be possible to use such a mechanism to convert a conventional optically reflective thin-film material into a material which, owing to its amplified Coulomb repulsive effects, would reflect frequencies as low as microwave-band with the same precision as smooth, optically reflective surfaces do visible light.